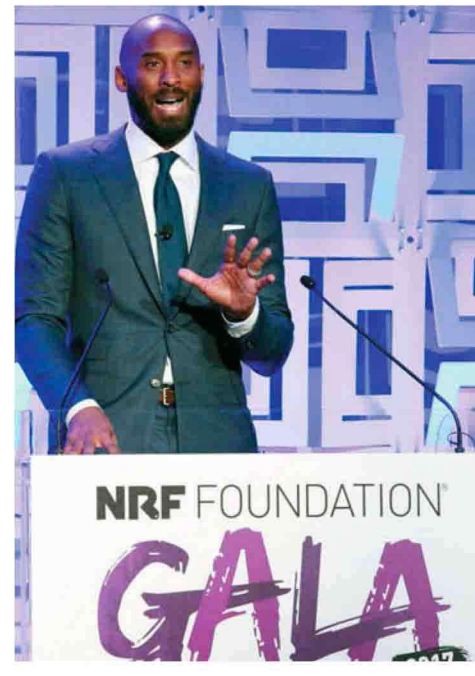


RISING TO THE CHALLENGE AT RETAIL'S BIG SHOW

A record crowd of nearly 35,000 people heard from hundreds of retail industry leaders and saw the latest and greatest offerings from nearly 600 exhibitors last month at NRF's Annual Convention & EXPO — Retail's BIG Show. Hundreds of future retailers participated in Retail's Student Program, the NRF Foundation raised \$2 million at its third annual Gala and NRF announced RISE Up, an industry-wide training and certification program. The following is a compendium of highlights from Retail's BIG Show.



Attracting and Retaining Top Talent

As retail continues its rapid transformation, efforts to find and keep the right employees must change along with it. It's not just that the people are different; technology has ensured that the jobs are, too.

Consider data analytics; two years ago Macy's had no team focused solely on the field, according to Chairman and CEO Terry Lundgren. "But now we do," Lundgren said during a keynote panel discussion on "Building Tomorrow's Workforce: How Retailers Are Attracting and Retaining Talent."

The panel also included Greg Foran, president and CEO of Walmart U.S., and James Rhee, executive chairman and CEO of Ashley Stewart, and was moderated by Bill Brand, president of HSN.

"We have to embrace new thinking to meet the demands of this new workplace," Brand said. "We must experiment" and collaborate.

"What we all know is that change is constant," Brand said. "In the next five years, they say retail will change more than in the past 50. ... Now is the time to think and act differently."

Members of the panel spoke about ways their companies are doing just that. Foran talked about numerous Walmart efforts to change with the times: The Pathways entry-level training program offers basic skills; there are plans to build 200 training academies by the end of the year; and the company is raising pay



Bill Brand, Greg Foran, Terry Lundgren and James Rhee

rates, working on retention and ensuring associates have the right technology to do their jobs.

"We know if we can get the army of Walmart to march, it will not just be better for Walmart, but better for the industry as well," Foran said.

Rhee, meanwhile, spoke about the importance of culture and loyalty. Plus-size fashion and

trend retailer Ashley Stewart was founded to provide women a boutique-like setting in urban areas, and has long stood for values like respect and empowerment.

Rhee became CEO in mid-2013 as the company was headed toward its second bankruptcy, and by championing kindness, transparency and focusing on the core customer, the company is now thriving. Ashley Stewart also has a highly engaged — and loyal — customer community.

"I know the industry is going through a lot of change," Rhee said. "I hope it's some form of encouragement that what was arguably one of the worst businesses could reinvent itself around something as basic as loyalty and friendship." As for the employees, he said, they became leaders the minute they felt safe.

Lundgren said ongoing training, regardless of level, is a key component in retention. He also noted how crucial it is to keep sharing the stories of retail opportunity and of individual company culture and progress. "Those are the things that make people say, 'I think I'd like to work for that company,'" he said.



Mike Mauler

Using Data to Revise Retail Business Models

In a forum moderated by Rod Sides, retail, wholesale and distribution leader for Deloitte LLP, Mike Mauler, executive vice president and president of GameStop International, and Colin Watts, CEO and chief health enthusiast for The Vitamin Shoppe, described ways in which insights about their customer base derived from consumer data have helped change and evolve their business models.

Sides noted that both the U.S. economy and retail sales are growing at about 2 percent per year. "In a slow-growth pattern like this," he said, "overall, retailers seek to grow by taking business away from each other."

Meanwhile, the store journey is changing, as is the role of the store itself. The actual trip to the store is increasingly part of the fulfillment stage of the buying process: Either the consumer is picking up an order placed online, or they have gone to the store to see and make

the final purchase of a product long since decided upon.

According to Deloitte, only 47 percent of surveyed customers report being satisfied with their store experiences on the logistical, taking-care-of-business level; 41 percent report being satisfied on the emotional level. “Expectations of the store experience are being set by the consumers’ digital experience,” Sides said, which leads to disappointment.

The rewards for solving this problem are considerable; industry leaders — those differentiating themselves both on products and experience — are reporting 13 percent cumulative average annual sales growth rates.

GameStop has apparently cracked that code. The retailer has some 50 million members in its loyalty program worldwide. In Australia, its most recent annual EB Games Expo attracted 35,000 attendees; of 21 million Australians, 19 percent are GameStop loyalty members.

“We think globally, and we use loyalty program data to interact personally with our customers,” Mauler said. The program is “not about points or perks. Outside the U.S., points don’t even count. It’s about understanding customer data and using that knowledge to shape our business model.”

As an example, Mauler cites what gamers refer to as “loot” — themed

merchandise tied to the imagery of games or fantasy entertainment. GameStop’s customer base — 65 percent of whom are female and family shoppers — let the company know that the eight feet of shelf space devoted to loot in a normal GameStop store was not enough.

In response, the company has launched a chain of stores called Zing that are devoted solely to loot, which represents sales of \$500 million annually. By the end of the year there will be 80 Zing stores.

The Vitamin Shoppe is in the process of transforming its customer base — or, to be more accurate, the customer base is transforming itself. From being a preoccupation for a few, concern with proper nutrition and exercise is now “a national obsession,” Watts said.

In response to the changing needs of its customers, The Vitamin Shoppe is transforming its appearance and business model. From a somewhat intimidating display of shelves of pills and powders, the stores now feature meeting places for one-on-one and group consultations, sampling stations and other features designed to help customers understand how they can help their customers.

“We’ve become a destination store,” said Watts. “We have three times the number of first-time customers, and 91 percent of them say they would recommend it to friends and family.”

Influencing Authenticity on Social Media



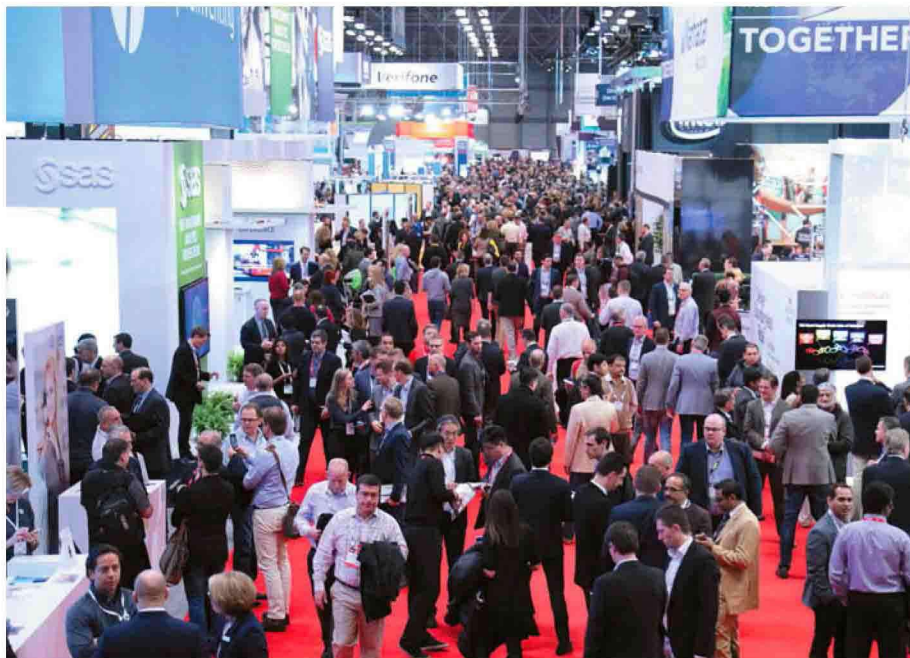
Every community has its own culture, and social media is no different. And each channel has behaviors unique enough that non-natives stand out. Participating in this type of community as a brand requires insight, understanding and authenticity — and working with influencers may well help.

Abigail Posner, head of strategic planning for The Zoo, Google’s creative think tank, said Google has worked to leverage various platforms — mobile, YouTube and search — and is now doing the same with social. It’s not unusual for clients to come to Google confused, she said, because there’s just “so much out there.”

In an effort to help, Google worked with anthropologists to “decode” what was really going on. What it discovered is how human a space social media is. It is an immediate, raw and unfiltered environment that expects and requires authenticity from individuals and brands alike.

Influencers can help. Different from the traditional idea of celebrity as influencer, these people still present lifestyles that others want to emulate, but do so in a more accessible way.

Melissa Davis, executive vice president and general manager for ShopStyle, said her company pairs retailers with such influencers, and those retailers can see real results: One larger retailer spent





Vicki Cantrell,
Melissa Davis and
Abigail Posner

\$30,000 to work with three influencers on a recent holiday campaign, “and those influencers drew over \$500,000 in sales.”

ShopStyle scours its network of influencers to find the right fit, studying years of data about what those influencers have worn or used and what they — and, therefore, their audiences — are interested in. “You wouldn’t want someone talking about your brand that wouldn’t use it or wear it in everyday life,” Davis said.

Consumers have used social media for authenticity and relationship on an individual basis, so they now expect brands to do the same. Posner spoke of the “energy exchange” that social allows, and believes it offers opportunities for connection that simply don’t exist elsewhere.

Yes, social media can be seen as too negative and/or combative, but most of the time, she said, “We’re there to lift each other up. Be generous, whether it’s with other brands, or if you’re an influencer, with other influencers, with other consumers. Applaud what they’re doing. This is not a zero-sum game anymore. We’re all in this together, and we’re all about making this a better place for everybody.”

And for those willing to be generous, she said, “the rest of us will be excited and applaud you back. It’s about humility, generosity and relationship.”



Sir Richard Branson

Branson: Retailers Need to Think Like Entrepreneurs

In a fireside chat with outgoing NRF Chairman Kip Tindell, Virgin Group founder Sir Richard Branson offered some thoughts and recommendations for retailers struggling to keep their footing in today’s environment.

“If you were [an established] U.S. retailer ... faced with declining foot traffic, what would you do?” asked Tindell, the co-founder and chairman of The Container Store.

Branson, who describes himself as a “serial entrepreneur,” noted that one of his earliest ventures, Virgin Megastores, was rendered obsolete by the invention of the iPod and the transition to distributing music via digital download.

“When we saw the handwriting on the wall for Virgin Megastores,” he said, “we decided, well, we don’t have to keep being a retailer. We looked at what products were selling well in our stores. It was the early days of mobile phones, so we decided [to] start a mobile phone company. It was the early days of video games doing well, so we thought, let’s get out and start a video game company.

“And actually, the businesses we started by sort of using the stores to see what products were selling became much, much bigger than our retail stores ever could have been. I know it’s easy to glibly say this, but I think people who own retail stores should not think of themselves as always being retailers. They need to be entrepreneurial, and they need to spin off businesses on the back of their retail that can make them money to help the retail stores to survive.”

Turning to management opportunities for women, Tindell said, “I think about 24 of the *Fortune* 500 CEOs are women. What do you think it takes to get better representation in the upper ranks for women?”

Branson responded that he feels “quite strongly that you need to do something that is against most women’s wishes, which is what they do in Scandinavia. The government needs to insist that companies have 40 percent or 50 percent women on their boards, and it needs to be legally forced through. If it’s not legally forced through — if it’s just left up to us men — I think another two or three generations will go by before we have something like parity.”



Kip Tindell and Sir Richard Branson

At Virgin, he said, “we find that our women are just as good as men, particularly at something like retailing. Women understand their customers, I think, better than

men — I think they’re just generally better at it. It’s bizarre that you don’t have more women running retail companies.”

He then asked for a show of

hands from the women in audience who agreed with him that equal representation on corporate boards should be legally enforced. Noting that very few women raised their hands, he said, “But in Scandinavia, where it is forced through, women now, five years on, feel very strongly that it’s worked — and so do men.”

Asked how he manages an enterprise with so many companies, Branson said, “I learned very early to delegate. Too many people building businesses feel that they have to do everything themselves.”

At the same time, however, he stressed the need to pay attention to detail. “Spot problems and fix them quickly,” he said. “That’s often why small restaurants, where the owner is present, are better than big ones.”

The trick, he said, is getting a big company to run like a small one.

Walmart’s View on Retail’s Role in Society

Kathleen McLaughlin, the chief sustainability officer of Walmart and president of the Walmart Foundation, announced a \$2 million grant to the National Retail Federation for its Fundamentals of Retail training/credentialing program, developed as part of NRF’s RISE Up initiative to offer credentials and training to help entry-level job seekers build meaningful retail careers.

Walmart also announced a \$2.9 million grant to the League for Innovation in the Community College for curriculum development, aimed at the same goals.

This, McLaughlin noted, is part of Walmart’s ongoing commitment to alter the way business is done and evaluated in today’s world. *Fortune*, she said, now publishes a new listing, “Top 50 Companies that Are Changing the World.” Walmart has been high on every list, most recently for its initiative to create economic opportunity for all its stakeholders.

“Today, the leading companies are now recognizing that business needs to strengthen the systems we rely on in a fundamental way. I offer you a simple proposition,” McLaughlin said. “Business exists to serve society.”



Kathleen McLaughlin

At Walmart, the transition to this point of view gained serious momentum in 2005 in the aftermath of Hurricane Katrina. The storm, considered the most expensive natural disaster in U.S. history, devastated communities along the Gulf Coast from central Florida to east Texas. In the wake of poorly executed state and federal disaster-

relief efforts, Walmart found itself in the position of de facto first responder, rushing staples like water, fuel and toilet paper to thousands of refugees.

In the first days after the storm, the company contributed \$20 million in cash donations, 1,500 truckloads of free merchandise, food for 100,000 meals and the promise of a job for every one of its displaced workers.

“That had a really profound effect on the leadership of Walmart — Lee Scott Jr., who was CEO at the time, in particular,” McLaughlin said. “He began asking, ‘What if we were that company every day?’ and he really started to reflect on the environment and how we can create a more sustainable model of consumption.”

Later that fall, Scott delivered a speech to the company in which he set out some goals for Walmart around sustainability: to be powered 100 percent by renewable energy, to generate zero waste and overall to have more sustainable products.

One item on Walmart’s agenda is providing economic opportunity. Entry-level employees now come on at \$9 per hour, and move up to \$10 at the completion of an introductory training program, usually within six months.

“How do we get you from that to a middle skills job? Training and education,” McLaughlin said, which can involve anything from online GED or college courses to extensive on-the-job training.

Walmart store managers earn an average of \$170,000 per year, and “75 percent of our store managers started out as hourly people,” she said. “Doug McMillon, our CEO, himself started out unloading boxes in a distribution center.”

McLaughlin emphasized that Walmart’s commitment to economic opportunity, as with its initiatives in sustainability and community well-being, arises not from an impulse to do good so much as an evolved understanding of what constitutes a business’s self-interest.

“We can create business and social impact simultaneously,” she said.

Driving ‘Amazing’ Customer Experiences through Data

Intel CEO Brian Krzanich did more than talk about transformation and exciting advances in retail technology during his keynote presentation: The session also included numerous live demonstrations of several solutions.

The thread tying them all together? The strategic gathering and use of data.

“We believe data has become one of the most important forces in all of technology,” Krzanich said. In fact, he characterized data as the “new oil,” with the same capacity as fossil fuels to change the world.

Data is transforming every industry, but Krzanich believes it will impact retail in three specific ways: re-inventing the in-store experience, utilizing the power of data analytics and then creating the “store of the future.”

Many factors play a part in creating memorable customer experiences. From the vantage point of a tech company, the true questions are how the customer can have more control and how the retailer can receive more data.

Virtual reality can assist here; the session included a demonstration of how Chinese online retailer Alibaba provided a 3D bricks-and-mortar New York department store experience on consumers’ smartphones. The virtual

reality experience was up for 11 days, and garnered more than 8 million users.

Other demonstrations included the use of virtual reality for store configuration and planograms (including heat maps and data overlays), as well as shopping in a virtual version of the consumer’s home.

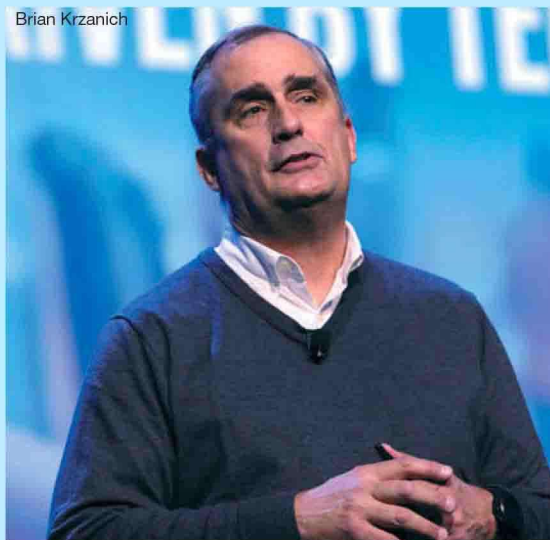
“You can see how in your store, your customer can have a very different experience, and you’re going to get data about what they are looking at,” Krzanich said. “What styles they like. What colors they’re looking for. What’s interesting to them. What they put into their shopping cart but then take out at the end of the day and don’t purchase. All of that data is available.”

Carrie Ask, executive vice president and president of global retail with Levi Strauss & Co., spoke of being a test customer for Intel in several stores, working toward “real-time, all-the-time inventory insights” through RFID tags on all items and ceiling-mounted sensors.

Retail store traffic may be declining, she said, but purchase intent is rising since people don’t “have to” go to a physical store anymore. That makes the accuracy of shelf-level inventory more important than ever, so the sale — and possibly the customer — won’t be lost.

Tally, the autonomous shelf-auditing and analytics solution from Simbe Robotics, also made an appearance; the robot is still in trials with retailers, but will be available soon.

The session also included a demonstration of Recon Jet Pro smart eyewear, connected glasses that can provide hands-free help with picking while increasing efficiency and speed in the warehouse. There also was a presentation highlighting the use of responsive fitting rooms in a by REVEAL pop-up boutique. There, sensors pick up which items customers bring in to try on, allowing associates to have more dynamic conversations with them.



Brian Krzanich

Technologies Changing Retailers' and Consumers' Lives

A panel moderated by XRC Labs founder and Managing Director Pano Anthos discussed new technologies that are seen to have the potential to make a significant difference in the way we conduct our daily lives. Panelists included Sentient CMO Jonathan Epstein, Leif Jentoft, co-founder of RightHand Robotics, Sandra Lopez, vice president of the new technology group with Intel, and Loomia founder Madison Maxey.

Epstein described the impact artificial intelligence is having on retail websites. “The e-commerce conversion rate is 3 percent,” he said. “We’d shut down a store with those statistics.”

The problem with retail websites, he said, is that they have not evolved significantly in the past decade. They tend to be built with a hierarchical decision tree structure that requires the consumer to walk a slow and tiresome path to find the products they want.

Artificial intelligence applications, which query the shopper and quickly narrow the range of products offered, can streamline and personalize this process. Websites using AI personalization, Epstein said, are racking up 40 percent conversion rates and 16 percent increases in basket size.

Lopez and Maxey addressed wearable technology. “The transition we are making is from a world of wearables to a world of wantables,” Lopez said. “By 2020 there will be 50 billion connected devices, and they will interact. It’s all going to be driven by 220 billion overall sensors.”

A key question, she said, is what kind of use will be made of the resulting tsunami of data. “There are two possibilities,” she said. “One is that data is pollution. The other is that data is the new oil.”

Loomia is in the business of moving from smart wearables (chip-bearing shoes, etc.) to



Madison Maxey

making clothing itself smart.

“Imagine a future,” Maxey said, “where wearables are actually, well, wearable. This future needs robust and reliable smart fabric to become a reality. Our smart fabric conducts electricity in patterns, making a fabric into a circuit. These sorts of smart fabrics mean an exciting future for not just apparel, but also furniture, industrial wear and even wristbands.”

To create that future, Loomia is “mixing up stretchable and flexible conductive materials to bring energy to fabric — literally. We make enabling technologies to help brands, manufacturers and makers bring electricity to their products.”

Jentoft said robots are at a transition point. The technology has been around for decades, but it has been largely limited to structured, stable environments, doing the same thing — welding two parts together, picking up and moving heavy objects — over and over and over.

The new generation of robots, however, can operate in unstructured environments doing variable things; Jentoft demonstrated with a video of a robot picking and sorting products from baskets on a conveyor belt, identifying what it wanted from each basket and distinguishing the wanted objects from unwanted ones.

“This,” he said, “will enable robots to move from B2B to B2C.”



Kate Anketill

The Fourth Industrial Revolution

Kate Anketill didn’t use the words “might,” “could” or “perhaps” in her session, “Trends 2017: Retail Opportunity for the Fast-Changing World and the Human Mind.” Rather, the CEO of retail and hospitality trends consultant GDR Creative Intelligence laid down an imperative “must.”

“You must adapt,” she said. “You must

accept, in my view, that automation is coming. It’s not if. It’s when. You may choose not to move in that direction because you’ve decided to remain rustic and authentic and human, and that’s all fine. But don’t not do it because you didn’t know it was coming.”

Anketill shared a statistic from Oxford researchers that 47 percent of

U.S. workers are at risk of losing a job to automation and artificial intelligence within the next 20 years.

It is what Klaus Schwab, founder and executive chairman of the World Economic Forum, calls the Fourth Industrial Revolution. Some see this latest revolution as a fusion of the physical, digital and biological worlds.

It's happening now because we've seen 50 years of Moore's Law (the doubling of computer power every 18-24 months); the movement of AI into the cloud; exponential growth in machine learning; and AI becoming core to business models.

There is, however, an upside to the Fourth Industrial Revolution — for those willing to be disruptors.

Ancketill cited several areas of available technology in which retailers can adapt and get ahead.

First, there are new forms of interaction and service. These include distributed systems, machine learning and conversational interfaces. For example, she said, it has been estimated that the Amazon Echo will be in 40 million homes by 2020.

Second, there are adaptable service

delivery and manufacturing technologies: Think adaptable mechanisms, smart sensors and additive manufacturing.

Ancketill offered as examples Starship self-driving robots that cover the last few miles of delivery; the CowaRobot R1 suitcase, which syncs with the user's watch and follows behind; and Zume Pizza, with 56 ovens in a delivery truck that can predict and schedule cooking according to delivery time.

Finally, there's personalization and autonomous activity, which includes the digitized population, device-to-device networks and pervasive connectivity.

In this category, Ancketill pointed to TokyWoky working with L'Oreal Paris to increase engagement — and conversions — with customers answering each other's questions online, and the Back Me Up app from a British insurance company, which allows users to take photos of three items they want insured and pay \$20 a month to do so. If they want to change the items covered, they simply switch out the photos.

"It's utter simplicity and it's seamless," she said. "And everything has to be simple moving forward."



What's Holding Down Spending?

William Dudley, President and CEO of the Federal Reserve Bank of New York, offered his views on ways consumer behavior has changed in the United States over the past decade, and the impact of these changes on the retail industry.

Taking a path he described as somewhat different from the usual analysis and projection, Dudley focused his remarks on the relationship between housing and retail spending.

“I would argue that there have been some significant changes in the ways households finance

their consumption,” he said, “and I believe that changes in housing and mortgage markets have affected the willingness and ability of households to borrow, and that this in turn has had important consequences for the dynamics of consumption over the last decade.”

These changes in housing and mortgage markets, Dudley said, are an important reason that recovery

from the Great Recession of 2008 has been weaker than many — including the retail industry — would like.

What appears to have happened is that the housing crisis and its aftermath have made homeowners markedly less willing to leverage their home equity to finance retail purchases. In comparison to their behavior before the crash, they aren't using housing equity as collateral for short-term loans or taking out second mortgages.

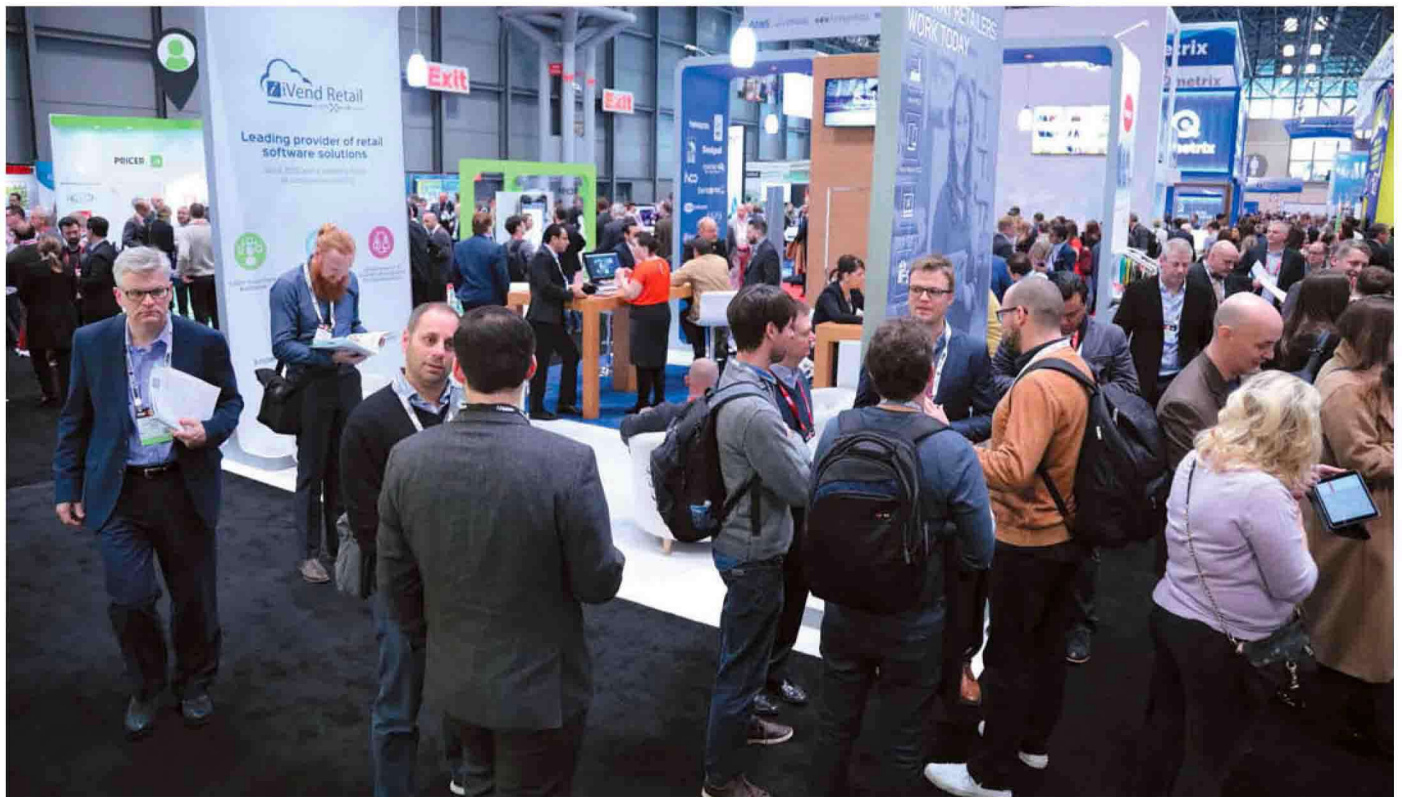
Some of this, Dudley acknowledged, is involuntary: Banks have changed their rules, and it's harder to get a loan than it used to be. Much of it, however, appears to be voluntary. Instead of buying second cars or taking extravagant vacations, people across the wealth spectrum are paying down their mortgages.

And they aren't — or at least appear not to be — betting that their houses will steadily and permanently increase in value by borrowing against the future.

All of which, by Dudley's calculations, subtracts about \$500 billion annually from retail spending. One thing that would help would be a doubling of the current 2 percent rate of economic growth, which is being projected in some parts of Washington, but Dudley indicated that such aggressive growth is unlikely.



Terry Lundgren and William Dudley



On the Fast Track

New York-based accelerator XRC Labs hosted a quartet of dynamic disruptors who highlighted their enterprises and how they fit into the broader landscape of retail evolution in the “Retail’s BIG Fast Track” session.

Liyia Wu, founder and CEO of ShopShops, spoke of the exponential growth in the Chinese cross-border shopping market, and how ShopShops connects these consumers with selected retailers in certain U.S. cities. The consumers — who spent an average of \$11,000 per trip to the United States in 2015, including \$5,400 on shopping — can buy while here, then stay connected once back home.

Alexa Fleischman is CEO and co-founder of Strypes, a platform that powers product personalization for e-commerce brands and makes the most of consumers’ desire to “constantly share what’s different and unique about themselves.”

Fleischman said it’s no longer about just offering myriad choices; consumers want to take part in the creative process, perhaps adding design elements. “Customers today are used to creating digital assets. ... They want the same credit with physical products,” she said. They’re happy to pay for it, too; consumers will spend up to 20 percent more for personalized items.

Kohl’s Omnichannel Innovations

In the opening to a session on Kohl’s omnichannel initiatives, Recode Senior Editor for Commerce Jason Del Rey observed that the retail industry’s innovation labs regularly produce technologies that generate initial buzz and excitement but fail to yield sustainable, business-enhancing products. Of today’s innovations, he asked Ratnakar Lavu, who serves both as chief technology officer and chief information officer for Kohl’s, what has the potential to truly make a difference?

Lavu conceded that there are “lots of shiny objects,” then cited artificial intelligence and machine learning, specifically chatbots, as technologies with the potential to have real impact.

“When you mention chatbots,” Del Rey said, “I have to say that I’m skeptical about messaging in terms of commerce today.”

Lavu agreed. “Definitely in terms of commerce, it’s going to be much harder. It’s going to take some time.” He went on to explain that there are situations — he cited one external example and one internal one — in which chatbot technology as currently constituted can be extremely useful.

The external example is the very common case of a customer wanting to know where their order is. A

Joe Beninato, founder and CEO of Banter, asked retailers why they continue to focus on their apps, when up to 95 percent of customers don’t use them. Instead, Banter focuses on connecting customers and companies through messaging.

“Your customers are telling you what they want,” he said, but “you’re not listening. You’re not giving it to them.” Consider, he said, that the average person spends more than three hours a day texting. “One hundred percent of your customers would message you today,” he said, “if only you would let them.”

Erik Skantze, co-founder and CEO of Perseus Mirrors, addressed the rapidly expanding smart home market, and how now is the time to explore opportunities. He gave a demonstration of a smart Perseus Mirror, showing convenience-based purchasing, as well as the ability to use online resources to solve problems. It has a bar code scanner, for example, that will display reviews, video and other related information. The goal, he said, is to “close the gap between retail and the home.”



Alexa Fleischman

chatbot backed by today’s big data tools and computational power, Lavu said, could find and provide the answer very quickly, transforming a frustrated customer into a happy one.

An internal problem directly relevant to Lavu’s responsibilities at Kohl’s is that of an employee who wants to change his or her password. Kohl’s uses Facebook Messenger to chat with customers and its own platform for internal communications.

Other topics that arose in the discussion were the need for technological solutions to help customers navigate the physical store, to help associates deal with the new role of the store as distribution center and to facilitate payment.

To help with payment, Kohl’s has introduced Kohl’s Pay as part of its app. This digital wallet solution is only being offered to holders of the Kohl’s card; Lavu sees it as an inducement for other Kohl’s shoppers to sign up for the card and the program, becoming more frequent and more loyal shoppers in the process. **STORES**



Jason Del Rey and Ratnakar Lavu